

A Study on the Consumer's Unreasonable Consciousness in the Event of Corona 19 Infectious Disease Crisis

Seon-Mi Hong¹, Jong-Ryul Oh^{*2}

¹ Student, Department of Start-up Management Graduate School of Industry, Seowon University

^{*2} Professor, Department of Business Administration, Future College, Seowon University

hsm1052ysh@hanmail.net¹, npod01@naver.com^{*2}

Corresponding author^{*}: Jong-Ryul Oh, E-mail : npod01@naver.com

Abstract

Background/Objectives: In this study, we analyzed the relationship between unusual and negative emotions such as 'Sense of isolation', 'Anxiety', 'Feeling of anger', 'Feeling of fatigue' and phenomena observed as unreasonable consumption due to long-term strong 'social distance'. Unreasonable consumption in the midst of a disaster called 'compensation consumption' seems to be due to impulse and compensation psychology. However, contrary to expectations, the effects of negative emotions were somewhat different from hypotheses.

Methods/Statistical analysis: The survey targets distributed and collected questionnaires from 308 people who have experienced meeting or executing consumption arising from social distance. The collected data verified the suitability of the structural equation model and the causal relationship for each concept.

Findings: First, 'Sense of isolation' does not have a significant effect on impulse and compensation psychology, but rather has a negative correlation with compensation psychology. Second, 'Anxiety' has been shown to have a significant effect only on compensation psychology. Third, 'Feeling of anger' has been shown to have no significant effect on both impulse and reward psychology. Irrational consumption, so-called 'revenge consumption', is judged not to be the result of anger but the increase in surplus disposable income during the blockade period. Finally, 'Feeling of fatigue' appears to have a negative effect on compensation psychology, such as 'Sense of isolation'.

No evidence has been found that the irrational consumption phenomenon, which occurs when the blockade is temporarily lifted, is the result of an emotional expression as a temporary increase in disposable income, not an impulse purchase or compensation purchase caused by anger, such as the term "revenge consumption." Therefore, the government needs policies to induce consumption through temporary reduction of special consumption tax and other measures to boost consumption. In addition, strong containment policies over a long period of time can play a very important role in preventing the spread of infectious diseases, but the stronger and longer the blockade is, the more likely it will have a negative impact on the economy. Therefore, the government will have to make very careful decisions in the intensity and cycle of containment and mitigation..

Improvements/Applications: Through this study, it provides policy implications for the market stability structure that can minimize psychological and property damage due to the prevention of safe living rights from crises such as infectious diseases and unstable consumer sentiment.

Keywords: Sense of isolation, Anxiety, Feeling of anger, Feeling of fatigue, Impulse psychology, Compensatory psychology

1. Introduction

Crisis(nouns) is a term referring to a dangerous crisis or period in which something suddenly comes to an unexpected situation or event[1]. Modern Society has become a sad society where not only the threat of natural disasters such as floods, typhoons, and earthquakes, but also the social threats caused by human resources such as large-scale fire, building collapses, and furthermore terrorism occur frequently[2]. Recently, following SARS in 2003, swine flu in 2009, and MERS in 2015, a respiratory infection called coronavirus infection (COVID-19) broke out in 2019, spreading rapidly and becoming the biggest threat to mankind. In Korea, the number of confirmed cases has increased rapidly since January 2020, when confirmed cases began to occur, and as of August 27, 2020, the cumulative number of confirmed cases around the world has exceeded 24 million and the spread rate is increasing faster[3]. The government, which experienced great social and economic turmoil due to the rapid spread of infectious diseases promoted a strong 'social distance' campaign after February 2020 by interpreting the provisions of Article 34 (6) of the Constitution[4] as actively as possible to prevent disasters and protect the people from their dangers.

The campaign physically prevented the spread of infectious diseases by minimizing contact between people, and its effect has dramatically reduced the number of confirmed cases in Korea, which once produced the largest number of confirmed cases of the Corona 19 virus after China. However, the prolonged strong 'social distance' has caused social daily life to change to a completely different aspect, resulting in new side effects, such as many people complaining of stress, depression, frustration, and loss of

motivation due to isolated living conditions[5].

However, even in this crisis, it has been discovered that people do not shrink their consumption of consumption, which gives them some value or need for basic living. According to a survey conducted by Hana Financial Management Research Institute, non-face-to-face consumption sales increased to 41% for Internet shopping and 19% for home shopping in the first quarter of 2020, while sales decreased to -52% for duty-free shops and -23% for department stores. In addition, the average amount of online shopping decreased to -14% for home shopping, -10% for delivery service, and -2% for internet shopping, although the number of online shopping increased rapidly to 40% for home shopping, 21% for delivery service, and 44% for Internet shopping. On the other hand, the number of offline shopping dropped sharply with -35% for department stores, -19% for large discount stores and 2% for convenience stores, but the average amount increased to 21% for department stores, 3% for large discount stores and 4% for convenience stores[6]. There is an attempt to describe this phenomenon as "impulsive or compensating consumption." This "impulsive or compensatory consumption" can be understood as expressing the past experience or present state of mind that an individual remembers, not by natural temperament or compulsion. Research on how the spread of infectious diseases, which affect our society as widely as in time and space as it is now, affects consumers' choices, in other words, whether the rationality of classical economics can explain these consumers' behavior is very insufficient.

From this point of view, the purpose of this study is to:

First of all, by looking into the effects of the characteristics of isolation, anxiety, anger and fatigue on impulse psychology and reward psychology, we would like to study consumer behavior about influencing unreasonable consumption to consumers.

Based on the results of the analysis, we are trying to draw implications for the strategic direction of the government and businesses to cope with irrational consumption behaviors that may appear at the time of infectious diseases and social disasters. These implications can be used as a basis for the government's economic policymaking, which aims to minimize economic impact, and also as data for consumer behavior analysis to establish a corporate marketing strategy.

2. Theoretical Considerations

2.1. Sense of isolation

Sense of isolation refers to being left alone because one does not socialize with or receive help from others[1]. The sense of isolation, which perceives an individual as being separated from the group's standards, is seen as a 'desperate situation' or a 'disengagement from relationships[7].'

The sense of isolation is a similar concept, such as loneliness, solitude, etc., which means 'the subjective experience or feeling of an individual who feels negative or unwelcome when the current social relationship is not as amicable or satisfying as he or she wishes[8].'

Especially from a social point of view, sense of isolation is the feeling you feel when you are isolated from others without smooth communication due to a lack of relationships with close friends, attachment, and community. It can be caused by situational factors such as isolation from physical space, interruption to social relationships, or change of status, such as physical distance and psychological distance[9].

The characteristic of sense of isolation is that social networks tend to be smaller, narrower, and less intense or frequent.

Thus, the characteristic of this sense of social isolation tends to be smaller, narrower in scope, and lower in intensity or frequency of interaction[10].

2.2. Anxiety

Anxiety is a state of anxiety and anxiety[1]. The anxiety first introduced by Freud was defined as 'something that feels like a stationary state or condition of a human organism[11].

In other words, anxiety is a psychological response to a threat or danger that is caused by fear, tension, or concern that is perceived as being threatened under certain circumstances[12]. It refers to the psychological state of negative subjective feelings about uncertain outcomes[13].

Consumers experience psychological anxiety when they feel they cannot secure safety[14]. It can also be different by the degree of recognition of other people's attention or social situations[15], so social anxiety also means the anxiety or negative assessment you feel when you encounter an unfamiliar social situation or a social situation watched by another person, or anticipate such a situation[16].

2.3. Feeling of anger

Anger refers to a sex that is extremely angry or so[1]. Experiencing anger is a very different concept from expressing anger. The emotional state felt with the physiological response means experiencing anger, and also the feeling of anger is that it expresses the individual's response style of expressing anger, that is, anger at the behavioral level. Therefore, even if one experiences a similar level of anger, one person may have different ways of dealing with it [17].

Most anger is caused when any external force arising from interpersonal situations is perceived to interfere with or hinder one's pursuit of personal planning, goals, well-being, etc., and is betrayed by others, frustrated by desire, unjustified criticism, or improper consideration[18][19].

In addition, anger that is commonly experienced in everyday life is caused not only by external events but also by internal psychological discomfort or memories. Especially when you are late for a fault caused by the other party, you tend to experience anger the most[20].

2.4. Feeling of fatigue

Fatigue refers to a condition in which one's mind or body is tired from overwork[1]. Feeling of fatigue can be described as physically or mentally exhausted and energy-starved due to a condition in which one cannot perform one's daily life or role by continuous effort or force[21][22]. So many physiologists have seen feeling of fatigue as the end result of excessive energy consumption[23].

Therefore, feeling of fatigue has been studied a lot in medicine, psychology, and organizational theory in business administration. In general, feeling of fatigue causes decreased motivation and activity, both physically and mentally, resulting in impaired ability and willingness to perform tasks[24][25].

2.5. Impulse psychology

Impulse is a stimulus in the mind that makes you feel the desire to act at a moment's notice[1]. As an impulse is a psychological phenomenon that can occur at any time and in any situation, it is a condition in which external stimuli make you want to act suddenly or strongly[26]. Sometimes people's strongly synchronized behavior makes it somewhat or very difficult to control rational behavior[27]. Impulse psychology, which involves unplanned and difficult-to-control emotional responses, leads to decisions that are fast-response and lack predictive skills, and changes to a state in which consumers immediately feel the urge to buy a product or service without stifling their strong desire to buy a product or service[28][29]. In other words, consumers who make impulse purchases are completely unaware of the consequences of buying behavior and have a strong feeling of having to purchase products or services, so they may use impulse purchases as a means to escape unpleasant moods, such as melancholy feelings, frustration, or boredom[30].

Therefore, the following study hypotheses were established:

H1: The sense of isolation will have a positive effect on impulse psychology.

H2: Anxiety will have a positive effect on impulse psychology.

H3: Anger will have a positive effect on impulse psychology.

H4: Fatigue will have a positive effect on impulse psychology.

2.6. Compensatory psychology

Compensation refers to paying back a person's debt or goods received, or paying back in return for any work or trouble or grace received[1]. Compensation, according to Taylor, is considered the most important factor in satisfaction and performance[31]. Compensation can also be caused by factors that affect the individual's characteristics. In general, the study of individual motivational preference factors is typical of the study on individual characteristics, such as individuality and fairness perception, and the characteristics of perception and task of individual tasks[32]. Research on compensation has been developed on the basis of Skinner(1953)'s theory of reinforcement, and Locke(1968)'s theory of setting targets now operates as a means of motivating employees in the form of wages, incentives, promotions, etc. in most organizations or enterprises[33][34]. In addition, compensatory consumption is a term first used by Caplovits(1968), which originated from the initial concept of 'the desire to supplement and supplement something that is lacking for oneself'[35]. Since then, Scherhorn(1990) has analyzed compensatory consumer behavior as a means of expressing self-worth, self-restoration, self-respect, and self-realization goals. [36].

Therefore, the following study hypotheses were established:

H5: The sense of isolation will have a positive effect on compensation psychology.

H6: Anxiety will have a positive effect on compensation psychology.

H7: Anger will have a positive effect on compensation psychology.

H8: Fatigue will have a positive effect on compensation psychology.

2.7. Unreasonable consumption

An irrationality means something that does not conform to the rightful reason or reason[1]. While rational behavior is centered on rational logic and acts on the basis of objective values, irrational behavior is not based on reason, but by emotion, etc., which refers to accidents or beliefs that interfere with the continuation or improvement of healthy human behavior without the role of legitimate grounds[37][38]. Therefore, irrational belief means an impractical and illogical system of thought[39]. This may result in consumers having different attitudes depending on expected profits or losses in the face of uncertain selective situations[40]. Di Mauro and Maffioletti(2004) argued that when observing consumer attitudes, they tend to pursue risks in areas where potential losses are expected but avoid risks in events with high uncertainties[41]. From the point of view of irrational consumption, irrational consumption behaviors such as impulse buying, synchronic buying, and ostentatious purchases lead to a vicious cycle of taking uncertain risks even when potential losses are expected. [42].

Therefore, the following study hypotheses were established:

H9: Impulse psychology will have a positive influence on unreasonable consumption.

H10: Compensation psychology will have a positive influence on unreasonable consumption.

3. Research Design

3.1. Research Model

For the empirical analysis of this study, we would like to grasp the impact relationship as in [Figure 1] on the effects of isolation, anxiety, anger, fatigue, impulse psychology and compensation psychology on unreasonable consumption. The study model can be divided into two main categories. First, the characteristic is whether the relationship of isolation, anxiety, anger, and fatigue that can be felt in the event of an infectious disease or social disaster can stimulate consumers' appetite for consumption. Second, when the desire for consumption works, it can be seen that the form of unreasonable consumption appears due to impulsive psychology or compensatory psychological action.

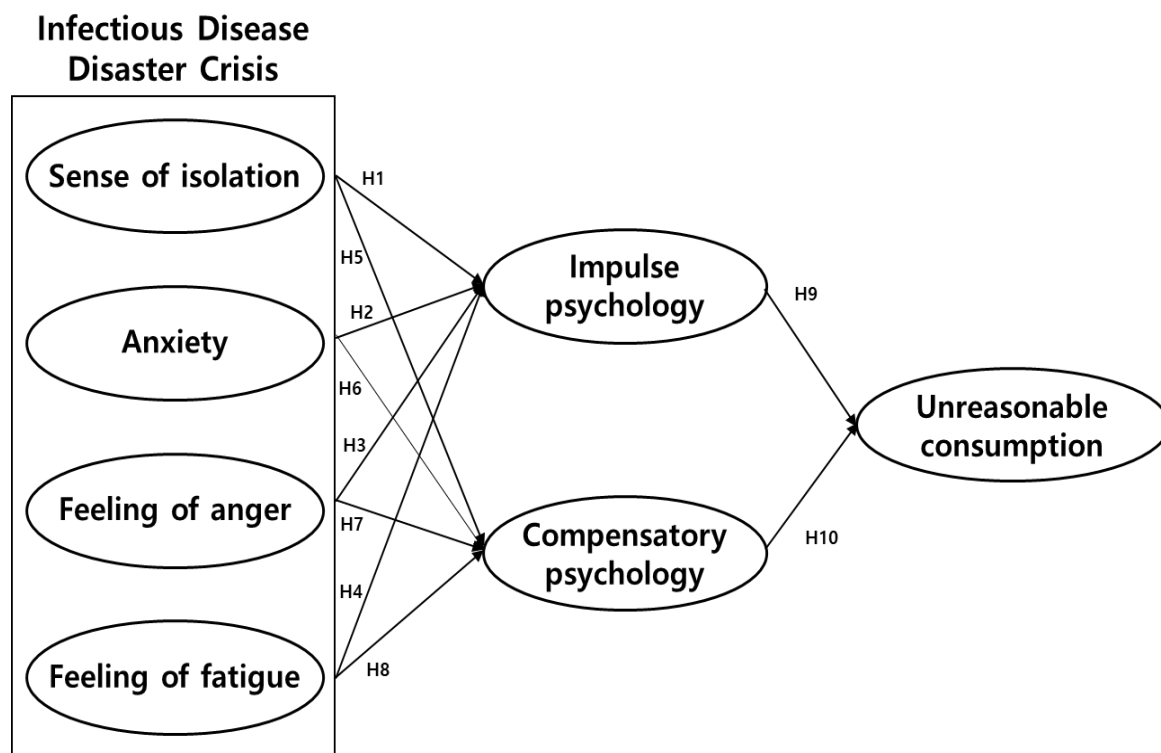


Figure 1. Hypothetical Model

3.2. Operational Definition and Measurement

This study formed an operational definition based on the following prior studies to measure isolation, anxiety, anger, fatigue, impulse psychology, reward psychology, and unreasonable consumption. Yim C. W. (2017)[43], Kang J. A. (2016)[44], Lee H. H. (2017)[45], Choi S. K. (2005)[46], Gong M. S. (2013)[47], and Hwang J. H. (2019)[48] for compensation, Non-reasonable consumption was used by referring to the studies of Cho H. W. (2017)[49], Kim S. H. (2019)[50], Choi J. M. (2016)[51], and Lee J. S. & Oh J. R. (2019)[52] for general matters. Each question used a five-point scale of the Recurring. We measured 'Not at all' as one point, 'Not at all' as two points, 'Normal' as three points, 'Yes' as four points and 'Very Yes' as five points.

3.3. Data collection and analysis

As a method of data collection and analysis, the non-probability method of sampling was investigated by Judgment Sampling. Therefore, the survey was conducted on those who have experienced meeting or implementing consumption arising from the current social distance. The preliminary survey was conducted for 10 days from June 15 to June 24, 2020, and 50 copies were distributed and 50 copies were recovered. Based on the recovered questionnaire, the questionnaire was constructed by modifying and supplementing the reliability, feasibility verification, and unnatural parts of the response. The survey was conducted for 31 days from July 1 to July 31, 2020, and 350 copies were distributed and 308 copies were recovered. The collected valid samples were verified by reliability verification and the Cronbach's Alpha coefficient, and the validity was verified using a positive factor analysis to ensure internal validity of the validity of the determination and convergence feasibility. In addition, the general characteristics of those surveyed were used to analyze frequency analysis. The suitability of the structural equation model and the causal relationship for each concept were then verified.

4. Empirical Analysis

4.1. General characteristics of survey subjects

Of the 308 respondents, 124 (40.3 percent) were male and 184 (59.7 percent) were female, nearly 1.5 times higher than male. By

age, those in their 40s had the highest number of people (33.8 percent). 74 office workers (24.0 percent) were employed, while 120 graduates (39.0 percent) graduated from four-year universities. Other general characteristics of the surveyed persons are shown in Table 1 below.

Table 1 : General characteristics of participants

Category	Division	Frequency (persons)	%	Category	Division	Frequency (persons)	%	
Sex	Male	124	40.3	Shopping companion	Alone	156	50.6	
	Female	184	59.7		Spouse	76	24.7	
Age	Teenage	6	1.9		Children's grandchildren	14	4.5	
	20s	38	12.3		Friend	56	18.2	
	Thirties	59	19.2		Besides that,	6	1.9	
	One's	104	33.8	expense of expenditure	Less than 500,000won	270	87.7	
	One's fifties	85	27.6		500,000won~ Less than 1,000,000won	34	11.0	
	Over sixty	16	5.2		1,000,000won~ Less than 1,500,000won	3	1.0	
Career	Self-employment	40	13.0		1,500,000won~ Less than 2,000,000won	0	0	
	Production job	22	7.1		2,000,000won~ Less than 2,500,000won	1	0.3	
	office work	74	24.0		More than 2,500,000won	0	0	
	professional occupation	65	21.1		Income	Less than 1,000,000won	37	12.0
	Sales position	25	8.1			1,000,000won~ Less than 1,500,00won	6	1.9
	The lady of the house	26	8.4			1,500,000won~ Less than 2,000,000won	36	11.7
	A military man	4	1.3			2,000,000won~ Less than 2,500,000won	53	17.2
	Not employed	4	1.3	2,500,000won~ Less than 3,000,000won		54	17.5	
	Student	26	8.4	More than 3,000,000won		122	39.6	
	Besides that,	22	7.1	Clothing/Fashion goods		133	43.2	
Educational background	Less than High School Graduation	9	2.9	Preferred product		Cosmetics	13	4.2
	High school graduation	85	27.6		Jewelry(noble metals)	30	9.7	
	A two-year college graduate	71	23.1		Groceries/ Daily necessity	55	17.9	
	A four-year college graduate	120	39.0		Digital/ Home appliances	34	11.0	
	Graduate degree or higher	23	7.5		Maternity product/ Child care products	10	3.2	
How to Collect Shopping Information	TV(Home shopping)	54	17.5		Need to train for crisis response	Besides that,	33	10.7
	Internet	212	68.8	Not at all		5	1.6	
	A newspaper magazine	2	0.6	Not so		11	3.6	
	Radio	1	0.3	Be normal		76	24.7	
	A acquaintance	15	4.9	Yes		156	50.6	
	Besides that,	24	7.8	Be quite so		60	19.5	
Total						308	100.0	

4.2. Variables and Reliability and Validity Verification

Prior to the empirical analysis, the reliability and validity of the data used in this study were verified. The Cronbach's Alpha coefficient and the exploratory factor analysis of the measurement items measured reliability and validity. A Cronbach's Alpha coefficient of 0.6 or higher is considered reliable[53], in light of the criteria, the measured items used in this study were 0.966, showing a satisfactory level of reliability, as shown in Table 2. A positive factor analysis was performed to analyze the validity of the constructions.

A positive factor analysis is an analysis of measurement models to verify the validity of the concept of composition and the validity of the determination. The concept validity of the concepts used in this study was found to be somewhat sufficient in that a factor load of 0.4% or more is considered highly correlated between the factors and the configuration variables, as shown in [Table 2]. [54, 55, 56].

Table 2 : Results of confirmatory factor analysis

Constructs	Question	Std. Loadings	Error Variance	t-value	p-value	Cronbach's Alpha	CR	AVE
Sense of isolation	Sense of isolation1	.828	.319		-	.944	0.676	0.515
	Sense of isolation2	.643	.716	10.747	***(.001)	.947		
Anxiety	Anxiety1	.825	.462	15.184	***(.001)	.943	0.743	0.591
	Anxiety2	.752	.400	-	-	.943		
Feeling of anger	Feeling of anger1	.894	.184	-	-	.943	0.920	0.794
	Feeling of anger2	.919	.132	23.621	***(.001)	.943		
	Feeling of anger3	.818	.284	19.034	***(.001)	.944		
Feeling of fatigue	Feeling of fatigue1	.842	.304	18.051	***(.001)	.942	0.937	0.713
	Feeling of fatigue2	.841	.333	18.001	***(.001)	.943		
	Feeling of fatigue3	.878	.246	19.313	***(.001)	.943		
	Feeling of fatigue4	.881	.238	19.376	***(.001)	.942		
	Feeling of fatigue5	.857	.267	18.517	***(.001)	.942		
	Feeling of fatigue6	.825	.374	-	-	.943		
Impulse psychology	Impulse psychology1	.959	.096	-	-	.943	0.961	0.892
	Impulse psychology2	.953	.105	38.528	***(.001)	.943		
	Impulse psychology3	.945	.130	36.838	***(.001)	.943		
Compensatory psychology	Compensatory psychology1	.890	.191	-	-	.945	0.916	0.846
	Compensatory psychology2	.938	.114	22.787	***(.001)	.945		
Unreasonable consumption	Unreasonable consumption1	.798	.350	-	-	.946	0.763	0.617
	Unreasonable consumption2	.767	.412	13.818	***(.001)	.947		

Following the positive factor analysis, correlation analysis was conducted as shown in [Table 3] to give an overview of the direction and relationship of the variables used in this study. Overall, it was shown that there was a significant relationship between the variables.

Table 3 : Correlation of matrix

Variable	Sense of isolation	Anxiety	Feeling of anger	Feeling of fatigue	Impulse psychology	Compensatory psychology	Unreasonable consumption
Sense of isolation	1						
Anxiety	.823* (.066)	1					
Feeling of anger	.613* (.059)	.719* (.059)	1				
Feeling of fatigue	.747* (.066)	.885* (.070)	.786* (.064)	1			
Impulse psychology	.422* (.065)	.552* (.064)	.465* (.061)	.518* (.066)	1		
Compensatory psychology	.274* (.052)	.365* (.050)	.458* (.051)	.632* (.052)	.686* (.068)	1	
Unreasonable consumption	.279* (.052)	.312* (.049)	.413* (.050)	.320* (.050)	.752* (.069)	.892* (.063)	1

Notice) *p<.01

Notice) () Estimate Value Meaning

4.3. Model Analysis and Hypothesis Testing

4.3.1. Structural Equation Model and Path Coefficient

In order to analyze the structural equation model, isolation, anxiety, anger, and fatigue were set as potential external variables, impulse psychology, compensation psychology were set as mediating endogenous variables, and irrational consumption were set as endogenous variables, respectively. The overall goodness-of-fit index of the model presented in this study is $\chi^2=329.391$, $d.f=153$, $p=.000$, $\chi^2/d.f=2.153$, $RMR=.038$, $RMSEA=.061$, $GFI=.906$, $AGFI=.871$, $NFI=.944$, $RFI=.930$, $IFI=.969$, $TLI=.961$, $CFI=.969$ gives a satisfactory figure when compared to the reference value. That is, χ^2/d for goodness-of-fit.f was less than 3, and GFI, NFI, RFI, IFI, TLI, and CFI were found to be greater than 0.9, and RMR was lower than 0.05, so it can be judged by a model that is reasonable to test the hypothesis of this study.

4.3.2. Verification of research hypothesis

[Table 4] summarizes the results of the verification of the 10 hypotheses set in the structural relationships of isolation, anxiety, anger, fatigue, impulse psychology, reward psychology, and unreasonable consumption. During the whole study theory, three

hypotheses were adopted: p-Value values were lower than 0.05, and t-Value values were defined values. The results of the research theory verification through the structural equation are as follows.

Isolation and impulse psychology ($\beta=-5.40$, $t=-1.265$, $p=.206$), compensatory psychology ($\beta=-3.29$, $t=-2.114$, $p=.035$) was not statistically significant, so hypotheses 1 and 5 were rejected. Anxiety is impulse psychology ($\beta=10.63$, $t=1.327$, $p=.185$) but compensatory psychology ($\beta=6.37$, $t=2.310$, $p=.021$) was statistically significant positive, so hypothesis 6 was adopted. Anger is an impulse psychology ($\beta=0.09$, $t=.121$, $p=.903$) and compensation psychology ($\beta=.43$, $t=.997$, $p=.329$) All rejected because they were not statistically significant. Fatigue is impulse psychology ($\beta=-5.39$, $t=-1.226$, $p=.2205$) and compensation psychology ($\beta=-3.44$, $t=-2.137$, $p=.033$) All were rejected because they were not statistically significant.

The parameters $\beta=.26$ $t=4.192$, $p<0.01$, compensation psychology and unreasonable consumption ($\beta=.71$, $t=10.171$, $p<0.01$) were adopted to represent statistically significant positive (+) relationships.

However, the sense of isolation affects the psychology of compensation, and the feeling of fatigue also affects the psychology of compensation. Therefore, it can be seen that hypotheses 5 and 8 have an influence but have a negative (-) effect.

Table 4 : Results of hypothetical path model

Hypothesis	Path	Path coefficient	Estimate	Standardized Estimate	t-value	p-value	Supported
H1	Sense of isolation → Impulse psychology (+)	-5.40	-6.781	-5.396	-1.265	.206	Rejected
H2	Anxiety → Impulse psychology (+)	10.63	14.373	10.630	1.327	.185	Rejected
H3	Feeling of anger → Impulse psychology (+)	.09	.107	.088	.121	.903	Rejected
H4	Feeling of fatigue → Impulse psychology (+)	-5.39	-6.320	-5.393	-1.226	.220	Rejected
H5	Sense of isolation → Compensatory psychology (+)	-3.29	-3.374	-3.287	-2.114	.035	Rejected
H6	Anxiety → Compensatory psychology (+)	6.37	7.029	6.365	2.310	.021	Accepted
H7	Feeling of anger → Compensatory psychology (+)	.43	.431	.432	.977	.329	Rejected
H8	Feeling of fatigue → Compensatory psychology (+)	-3.44	-3.295	-3.443	-2.137	.033	Rejected
H9	Impulse psychology → Unreasonable consumption (+)	.26	.196	.263	4.192	***	Accepted
H10	Compensatory psychology → Unreasonable consumption (+)	.71	.650	.711	10.171	***	Accepted

*** $p<0.01$

5. Conclusion

This study sought to identify the impact of isolation, anxiety, anger, fatigue, impulse psychology, compensation psychology, and irrational consumption, and to present policy suggestions related to the promotion of consumption to policy-makers who, in the event of infectious diseases and social disasters, have to worry about quarantine and economy together. Therefore, the implications of this study are as follows:

First, isolation has been shown to have no significant effect on both impulse and reward psychology. These analyses show that the increase in loneliness or alone time does not have much impact on impulse or reward psychology, nor does it significantly affect unreasonable consumption. Rather, the sense of isolation has been shown to have a negative correlation with compensation psychology, and the forced reduction of face-to-face relationships due to the Corona19 incident does not affect consumption, which could also depend on whether consumption has a network effect in economics that obtains information based on face-to-face relationships or feels the need to see others' consumption. Therefore, it is deemed necessary to encourage online consumption, not face-to-face consumption, as many consumers feel isolated amid the ongoing blockade could reduce consumption. However, the government should develop policies such as issuing online gift certificates or discount coupons that can be used by small and medium-sized online retailers due to the tendency of most of the online market revenues being concentrated on large companies.

Second, anxiety did not have a significant effect on impulse psychology, but there was a significant effect on compensation psychology. These analyses show that anxiety does not directly affect impulsive decision-making, that it is because it loses interest or interest in other things itself that are not subject to anxiety, and that compensation psychology is invoked to console oneself after anxiety has been resolved to some extent. Therefore, it is deemed effective to utilize consumption-boosting policies at an appropriate time when the anxiety is relieved in order to make up for the contraction of consumption due to the attack of anxiety.

Third, anger has been shown to have no significant effect on both impulse and reward psychology. This analysis is different from the expectation that anger will affect impulse psychology. It is interesting that the revenge consumption phenomenon reported a lot after the Corona19 incident is not related to anger. Thus, the nature of unreasonable consumption resulting from the temporary release of the Corona19 incident may be termed 'revenge consumption', but it should not be perceived as 'revenge consumption' but as a result of short-term consumption of surplus disposable income resulting from reduced consumption opportunities during the containment period. In other words, this pattern of retaliatory consumption needs to be viewed as a temporary increase in disposable income, not as a result of feelings such as anger. The purchase of expensive

electronics and luxury goods in the process of consuming more in a short period of time may not be a simple result of emotional expression, but a natural phenomenon, and if it is not luxury goods, it is necessary to utilize policies that induce consumption through temporary reduction such as special consumption tax to boost consumption.

Fourth, the hypothesis was rejected as fatigue did not have a significant effect on both impulse and reward psychology. However, the effects on compensation psychology, such as isolation, have been shown to have a negative (-) correlation opposite to the hypothesis. It is hard to say that an increase in fatigue leads to impulse or reward psychology, and rather, an increase in fatigue caused by a prolonged blockade could adversely affect consumption, given that an increase in fatigue may lower compensation psychology. Therefore, strong containment policies for a long period of time can play an important role in preventing the spread of infectious diseases, but the stronger and longer the blockade is, the more likely it will have a negative impact on the economy. Therefore, the government will have to make very careful decisions in the intensity and cycle of containment and mitigation.

Finally, both reward psychology and impulse psychology have been shown to have a significant effect on unreasonable consumption. For consumers showing unreasonable consumer spending behavior, this sentiment is an important factor, but more research is needed on which factors affect compensation psychology and impulse psychology. However, it seems clear that the pattern of unreasonable consumption resulting from the Corona19 incident is not just an emotional expression, and it is judged to be more right to assume that consumers are judging very rationally in the midst of complete environmental changes. Although this study has put much effort into presenting meaningful results and implications, there are many areas to be supplemented or further studied in the future. First of all, further research should be conducted not only considering the emotional aspects of the factors affecting compensation psychology and impulse psychology, but also the changes in consumption patterns such as the utilization of SNS, including gender and age characteristics, and accessibility to online shopping.

6. References

1. National Institute of Korean Language. 2020.
2. Park B. H. (2018). *A Study on the Disaster Response of Advanced General Hospital in the event of an Infectious Disease Crisis*. Graduate School of Korea University.
3. Korea Centers for Disease Control and Prevention.
4. Ministry of Government Legislation.
5. Song Y. S. (1993). Compensatory Buying Behavior of Urban Female Consumers. *Journal of Human Science*, 13(1), 5-25. Available from: http://www.dbpia.co.kr.virtual.seowon.ac.kr/journal/articleDetail?nodeId=NODE02288679&language=ko_KR
6. Hana institute of finance. Changes in consumption patterns brought by Corona19. 2020.05.
7. Lee H. N. & Park D. B. (2012). A Study on Poverty, Deprivation, Isolation and Life Satisfaction among Disable and Non-Disabled Household: Analysis of Seoul Welfare Panel. *Journal of Rehabilitation*, 16(1), 1-23. Available from: <http://scholar.dkyobobook.co.kr.virtual.seowon.ac.kr/searchDetail.laf?barcode=4010023406123>
8. Victor C. R., Scambler S. J., Bowling A. N. & Bond J. (2005). The prevalence of, and risk factors for, loneliness in later life : a survey of older people in Great Britain. *Ageing and Society*, 25(6), 357-375.
9. Jones W. H. (1985). The Psychology of loneliness: Some personality issues in the study of social support. In: I. G. Sarson and B. R. Sarson(Eds.), *Social support: theory, research, and applications*, oston, 56(1), 226-241.
10. Routasalo P. E., Savikko N., Tilvis R. S., Strandberg T. E. & Pitkala K. H. (2006). Social contacts and their relationship to loneliness among aged people-a population-based study. *Gerontology*, 52, 181-187.
11. Kim J. I. (2014). *A Study of the Psychological Anxiety on Golf*. Yongin University.
12. Spielberger C. D. (1972). *Anxiety: Current trends in theory an research*: 1. NY: Academic Press.
13. Lazarus R. S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
14. Lee K. H. (2008). Study on the Emprical Analysis and the Implications for the Effective Food Risk Communication. *Consumer Problems*, 0(34), 105-134. DOI : 10.15723/jcps..34.200810.105
15. Spector I. P., John C. P. & Eva L. (2003). Selective Attentional bias Related to the Noticeability Aspect of Anxiety Symptoms in Generalized Social Phobia. *Journal of Anxiety Disorders*, 17(5), 517-531.
16. Park S. A. & Song K. J. (2005). The Effect of Social anxiety on Psychological Adaptation. *Korean Psychological Journal Culture and Social Affairs*, 11(2), 1-29. Available from: <https://www.kci.go.kr/kciportal/ci/sereArticleSearch/ciSereArtiView.kci?sereArticleSearchBean.artiId=ART001135751>
17. Song J. E., Hwang S. T. & Jeon M. J. (2009). Relationship between Anger Level and Anger-Expression Mode: Age group comparison. *The Journal of the Korean Psychological Society: School*, 6(2), 213-227. DOI : 10.16983/kjsp.2009.6.2.213
18. Averill J. R. (1982). *Anger and aggression: An essay on emotion*. New York: Springer.
19. Reeve J. (2005). *Understanding motivation and emotion*(4th ed.). Hoboken, NJ : Wiley.
20. Kim K. H. & Hahn D. W. (1996). Effects of Goal and Spontaneity of High Self-Disclosure and Anger Tendency on Physiological Arousal, Catharsis, and Self-Evaluation. *Korean journal of health psychology*, 1(1), 66-88. Available from: http://www.dbpia.co.kr.virtual.seowon.ac.kr/journal/articleDetail?nodeId=NODE06368408&language=ko_KR
21. Matthews D. A., Manus P. & Lane T. J. (1991). Evaluation and management of patients with chronic fatigue. *American Journal of The Medical Sciences*, 302, 269-277.
22. Fisk J. D. & Doble S. E. (2002). Construction and validation of a fatigue impact scale for daily administration (D-FIS). *Quality of Life Research*, 11(3), 263-272.

23. Lee K. A., Hicks G. & Nino-Murcia G. (1991). Validity and Reliability of a Scale to Assess Fatigue. *Psychiatry Research*, 36, 291-298.
24. Smets E., Garssen B., Bonke B. & De Haes J. (1995). The Multidimensional Fatigue Inventory (MFI) Psychometric Qualities of an Instrument to Assess Fatigue. *Journal of Psychosomatic Research*, 39(3), 315-325.
25. Craig A., Tran Y. Wijesuriya N. & Boord P. (2006). A Controlled Investigation into the Psychological Determinants of Fatigue. *Biological Psychology*, 72(1), 78-87.
26. Evenden J. L. (1999). Varieties of impulsivity. *Psychopharmacology*, 146, 348-361.
27. Logue A. W. (1988). Research on Self-Control: an integrated framework. *Behavioral Brain Science*, 11, 665-709.
28. Rook D. W. (1987). The Buying Impulse. *Journal of Consumer Research*, 14(2), 189-199.
29. Barrat E. S. (1983). The biological basis of impulsiveness: the significance of timing and rhythm disorders. *Personality and Individual Differences* 4, 387-391.
30. Lee H. S. et al. (1996). *consumer behavior theory*. Seoul: law history.
31. Taylor F. W. (1914). *The principles of scientific management*, Harper.
32. Pullins E. B. (2001). An Exploratory Investigation of the Relationship of Sales Force Compensation and Intrinsic Motivation. *Industrial Marketing Management*, 30, 403-413.
33. Skinner B. F. (1953). *Science and human behavior*. NY: Macmillan Company.
34. Locke E. A. (1968). Toward a theory of task motivation and incentives. *Organizational Behavior and Human Performance*, 3(2), 157-189.
35. Caplovitz K. (1968). The Origins of Social Emotions and Self-regulation in a Low Income Group. *Cognition and Emotion*, 5, 19(7), 953-979.
36. Scherhorn. (1990). The Addictive Trait in Buying Behaviour. *Journal of Consumer Policy*, 1(13), 33-51.
37. Kim M. S. & Kim N. J. (2014). A Study of Restaurant Customer`s Irrational Choice Behavior: Comparison Based on the TRA and Social Action Concept of Max Weber. *The journal of tourism studies*, 26(1), 73-95. Available from: http://www.dbpia.co.kr.virtual.seowon.ac.kr/journal/articleDetail?nodeId=NODE06564217&language=ko_KR
38. Ellis A. (1962). *Reason and emtion in Psybotherapy*. Secaucus, NJ: Ctadel.
39. Ellis A (2001). The prince of reason. *Psychology Today*, 34, 66-76.
40. Curley S. & Frank Y. (1985). The Centre and Range of the Probability Interval as Factor Affecting Ambiguity Preferences. *Organizational Behavior and Human Decision Processes*, 36(2), 273-287.
41. Di Mauro C. & Anna M. (2004). Attitude to Risk and Attitude to Uncertainty: Experimental Evidence. *Applie Economics*, 36, 357-372.
42. Huh K. O. (2004). Irrationality in Consumption of Consumers Themselves and Other Consumers and its Satisfaction for the Consumption Life. *Consumption culture research*, 7(3), 85-101. Available from: <https://www.kci.go.kr/kciportal/ci/sereArticleSearch/ciSereArtiView.kci?sereArticleSearchBean.artiId=ART001161535>
43. Yim C. W. (2017). *Multiple Mediating Effects of Self-compassion, Perceived Emotional Support, and Deliberate Rumination on the Relationship between Loneliness and Post-traumatic Growth*. Chonnam National University.
44. Kang J. A. (2016). *Structural Relations between the Academic Stress and Conflictive Friendship of Teenagers and their Psychological Anxiety and Maladaptive Behaviors: A Multi-group Analysis depending on Gender and Grade*. Uiduk University.
45. Lee H. H. (2017). *Social Anxiety and Anger: The mediating role of Paranoid Thought and Hostility*. Graduate School of Catholic University.
46. Choi S. K. (2005). *The Effect of Foot Reflexlogy on Middle-aged Males with Occupational Stress and Fatigue*. Graduate school at Seokyeong University.
47. Kong M. S. (2013). *Antecedents and Outcomes for Impulsive Buying Level: Focused on Apparel: Product Buying*. Sungkyunkwan University.
48. Hwang J. H. (2019). *The effect of millennial generation's self-esteem and psychological independence from parents on the behavior of compensatory consumption*. Ewha Womans University.
49. Cho H. W. (2017). *Adolescents' improper consumption, maternal attitude and related variables*. Graduate school of Korea University.
50. Kim S. H. (2019). *Effects of Unreasonable Consumption Tendency on Foodservice Consumption: Focused on Veblen effect and Band Wagon Effect*. Graduate School of Kyonggi University.
51. Choi J. M. (2016). *The impact of unreasonable propensity to consume on the choice behavior of skin care salon*. Graduate School of Konkuk University.
52. Lee J. S. & Oh J. R. (2019). A Study on the Influence of Modern Peoples Hon-Bob Behavior. *A Study on the Influence of Modern Peoples Hon-Bob Behavior*. 13(5), 15-24. DOI : 10.21184/jkeia.2019.7.13.5.15
53. Nunnally J. C. (1967). *Psychometric Theory*, New York. Mcgraw-Hill. 1967. Available form: <URL:https://books.google.co.in/books/about/Ps>
54. Bagozzi R. P. & Yi Y. (1998). On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Science*, 16(1), 74-94. Available form: <URL:http://journals.sagepub.com/doi/abs/10.1177/009207038801600107>
55. Challagalla G. N. & Shervani T. A. (1996). Dimension and Type of Supervisory Control: Effects on Salesperson Performance and Satisfaction. *Journal of Marketing*, 60(1), 89-105. DOI: 10.2307/1251890
56. Singh J. & Rhoads G. K. (1991). Boundary Role Ambiguity in Marketing Oriented Positions: A Multidimensional,

Multifaceted Operationalization. *Journal of Marketing Research*, 28(3), 328-338. DOI: 10.2307/3172868